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TREASURE STATE HEALTH

VOL. 33, NO. 2 May-June, 1984 MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

HMO Growth Probably Will Cut Hospital Use

According to a research project published in the New England Journal of Medicine, the rapid growth of health maintenance organizations probably means considerably less use of hospitals in the future.

People who join HMOs pay flat fees which entitle them to as much medical care as they need. There are no deductibles and even annual physical exams are covered. However, clients must accept physicians on the HMO's payroll and use designated doctors, hospitals and nursing facilities.

The new research, part of an $80 million study by The Rand Corporation, was a project directed by Dr. Willard G. Manning. A Journal editorial by Dr. Alain C. Enthoven of Stanford University accompanied the article and called the research "a landmark on the journey toward a cost-effective health care system."

In a newsstory about the study, the Associated Press said it confirms that HMO patients spend substantially less time in hospitals than do people who seek care from private physicians. Other researchers have found the same thing, but, as AP notes, this study demonstrates the HMOs' cost advantage doesn't result from enrolling healthier patients.

Researchers found instead that the HMO doctors they studied "simply practiced a different style of medicine from that of fee-for-service physicians, and one that is less hospital-intensive."

About 15 million Americans are enrolled in an estimated 317 HMOs, of which 205 have federal accreditation. (There is not an HMO in Montana.)

Among the advantages of HMO enrollment is knowing in advance what payment is required for health care, which is important to people on fixed incomes, and because they cost less than ordinary health insurance.

The business has grown dramatically since 1973, when there were just 72 HMOs in the United States. By the beginning of 1984, the nation had 280. HMOs, according to the AP story, are especially popular in California, where 1 in 7 people belong, and in Minneapolis-St. Paul, where 1 in 3 are enrolled.

Some experts suspected HMOs are cheaper because, to begin with, their clients are in better shape — most people enroll through group plans where they work, so they must be at least well enough to hold jobs. But, the new research concludes that differences in the

(Continued on Back Page)

'Retired' Zaidlicz Takes Old Job, Floats River, Still Serves Board

Edwin Zaidlicz, Billings, who retired five years ago as Montana director for the U.S. Bureau of Land Management after 33 years of government service, is right back where he was.

Zaidlicz, a member of the Board of Health and Environmental Sciences — a job which is approaching full-time work with all of the certificate of need appeals, was called out of his "retirement" in mid-May to serve once again on an interim basis as head of the state BLM office.

Zaidlicz, who had BLM positions in Alaska, Oregon and Washington, DC, before his original Billings tenure, was appointed to his former post when his successor of five years ago, Michael Penfold, was selected to take over leadership of the agency's Alaska operations.

In less than a month, Zaidlicz was with a party, including Secretary William Clark of the U.S. Department of the Interior, floating through the drenching rapids of the Madison River to dedicate the nation's first wilderness to be administered by the BLM.

He shared a raft with Clark and the national BLM director, Bob Burford. As Burford described it later, "The Secretary of Interior was rowing, Zaidlicz was bailing, and I was enjoying the scenery."

Altogether there were 35 rafters and guides on the dedicatory float for the 6,000-acre Bear Trap Canyon Wilderness, 34 miles southwest of Bozeman. It is the BLM-managed part of the larger 259,000-acre Lee Metcalf Wilderness created last year, honoring the late Montana U.S. Senator, one of the country's leading conservationists.

Edwin Zaidlicz

Fewer Smoke; Those Who Do Smoking More

Per capita consumption of cigarettes is decreasing in the United States, but apparently those who do smoke are smoking more, according to a recent report by the national Centers for Disease Control.

Between 1963 and 1978 the per capita consumption of cigarettes by people 18 and older decreased by 0.6 percent a year, from 4,336 to 3,965 per person. In 1982 the United States ranked fifth in the world in per capita consumption, at a rate of 2,678 cigarettes per person.

However, the proportion of smokers has declined faster — by 1.6 percent a year, from 42 percent of people 18 and older in 1965 to 33 percent in 1980.

In addition to being a significant health problem for smokers themselves, recent research indicates more risk to 'passive' smokers than previously thought.

Dr. Anne Charlton reported in the British Medical Journal that a survey of more than 15,000 children showed a "significant link between parental smoking...and self-reported frequent coughs in children who had never smoked."

The study showed that the incidence of frequent coughing was "especially pronounced" among the youngest children. Of the boys under 11 who had never smoked, and whose parents did not smoke, 35 percent reported frequent coughs. With one parent smoking this increased to 42 percent, and when both parents smoked the proportion was 48 percent. Girls under 11 showed the same pattern, with 32, 40 and 50 percent respectively reporting frequent coughs.

Helena, Vaughn Women Honored As Outstanding WIC Employees

As part of a nationwide 10th anniversary celebration, Mary Hamann, Vaughn, and Susan J. DeBree, Helena, were chosen as Montana's outstanding employees in a special supplemental food program serving women, infants and children (WIC).

In marking the national observance, David L. Thomas, who manages the statewide program through the Montana Department of Health and Environmental Sciences, presented special certificates from the U.S. Department of Agriculture to Hamann and DeBree.

The program is funded entirely federally through the USDA and administered by the clinical programs bureau of the state department.

Agencies in each of the 50 states were asked by USDA to select two local officials outstanding in program administration and nutrition education.

The WIC program provides specific nutritious foods and nutrition education to women who are pregnant, breastfeeding or who have recently given birth; to children up to age 5, and to infants. People who qualify for the program are low income and determined by a health professional to be at nutritional risk.

The program began a decade ago when a growing awareness of the link between malnutrition and physical and mental development fostered concern that children lack vital nutrients during critical growth periods, Thomas explained.

The program opened in January, 1974, in Pineville, KY, and now is operated by some 1,500 local agencies at more than 7,000 sites.

In Montana each month, 39 counties and 7 Indian reservations are involved in the multi-million dollar program serving up to 12,500 clients.

The anniversary celebration and presentations to Hamann and DeBree were part of the state's annual wide-ranging training workshop for project directors and aides.

Hamann has worked in the Cascade county program for five years, and according to Cherry Loney, the project director there, "Her finest attribute is that she has weathered all the changes with WIC and adapted readily.

"She promotes the program in the small community in which she lives near Vaughn and is knowledgeable about community resources, referring people appropriately for assistance in solving social, financial and personal problems.

"Her input is often sought in program management and her supervisors value her opinions highly. She does an excellent job of training new employees, and through the years she has remained a 'support beam' in WIC, not only in Cascade county, but also statewide."

DeBree has been with the Lewis and Clark county program for more than eight years, and Bob Johnson, city-county health officer says, "She continuously maintains a remarkable high level of energy and creativity on a job which wears normal people down within months.

"She manifests a sincere interest in the clients' problems and carefully follows all of the guidelines, mandates and other intricate requirements of the WIC program. She comes to a successful conclusion with the clients she serves and her formula for that clients' success is artfully changed from client to client."

In addition to the WIC program, DeBree also helps the Lewis and Clark county well-child clinic to assist her clients, and she is one of the county's most important referral sources for public health nursing and well-child services.

Thomas noted congratulations also were appropriate for the following state WIC program local agency staff members who were nominated by their respective departments: Jyl Tyler, Dawson county; Rita Bradley, Butte-Silver Bow; Doris Biersdorf, Yellowstone county; Judy Harris, Cascade county; Joan McClusky, Missoula county; Irene Campbell, Fort Peck, and Josephine Hilderman, Big Horn county.

TREASURE STATE

HEALTH

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Known Number Of Carcinogens Actually Small

The actual number of known causes of cancer is small — the National Cancer Institute unofficially lists about 30 and the American Cancer Society's working list includes some 40 substances or activities. Here's a basic list:

Aflatoxins — naturally occurring in grains, peanuts.

4-Aminobiphenyl — manufacture of rubber and dyes.

Arsenic, inorganic arsenic compounds — pesticides, manufacture of glass and ceramics, food, drinking water, smelting of metal ores.

Asbestos — insulation, brake linings, manufacture of asbestos-containing items.

Benzene — manufacture of chemicals and plastics; paints, adhesives, gasoline fumes.

Benzidine — manufacture of dyes.

Bis (chloromethyl) ether — manufacture of chemicals, plastics.

Chromium, chromium compounds — manufacture of metal alloys and protective coatings on metals; paint, sometimes a contaminant in food and drinking water.

Cyclophosphamide — an anti-cancer drug.

Diethylstilbestrol (DES) — synthetic estrogen (female sex hormone), used to treat hormonal abnormalities, symptoms associated with menopause, sometimes breast and prostate cancer.

Hematite and iron oxide — mining of iron ore.

Isopropyl oils — manufacture of isopropyl alcohol (rubbing alcohol).

Melphalan — an anti-cancer drug.

Mustard gas — chemical warfare agent.

2-Naphthylamine — manufacture of dyes.

Nickel, nickel compounds—manufacture of metal alloys and metal plating; paint, sometimes a contaminant in food and drinking water.

Soots, tars, mineral oils — manufacture of coal tar and creosote, crude mineral oils and cutting oils, shale oils.

Tobacco, tobacco smoke—cigarettes, pipes, snuff.

Vinyl chloride — manufacture of plastics.

X-rays, radioactive materials, other radiation — sunlight, medical examinations, industrial processes.

'Blues' Move to Control Costs Of Medical Care to 80 Million

Surprising news for the nation's health care providers came in mid-June with Blue Cross and Blue Shield announcing guidelines intended to reduce the incidence of unnecessary X-ray and similar diagnostic procedures, thereby controlling costs for medical care of the insurers' 80 million subscribers.

In a copyrighted story by the New York Times, the program was described as beginning with an educational effort to convince physicians not to use certain procedures, but it is to lead to the end of payments for the disapproved procedures.

Bernard R. Tresnowski, president of the Blue Cross and Blue Shield Association, was quoted by the Times as noting a similar program instituted two years ago in respiratory treatment reduced costs $22 million per year.

Then, Tresnowski explained the use of diagnostic images, such as ultrasound, mammography and radio-nuclide scans, has increased rapidly and much of it is unnecessary or duplicative of other procedures.

Tresnowski emphasized that unnecessary use of such technology was widespread because new devices were being used in addition to older ones, when, in fact, they were designed to replace them.

There were 200 million such images produced last year at a cost of $7 billion, and an increase of 8 percent is expected this year, Tresnowski added. He said it is almost impossible to determine how many of these procedures are unnecessary.

And, Lawrence C. Morris, the Blues senior vice president for professional and provider affairs, was able to provide only an estimate that unnecessary procedures might account for 1 or 2 percent of the $7 billion, but even that would be $70 million to $140 million a year.

Under the new guidelines, for example, ultrasound would be used on pregnant women only when a specific problem was suspected, and Dr. Ervin E. Nichols, director of practice activities at the American College of Obstetricians and Gynecologists, immediately endorsed the program.

He said there were 3.5 million deliveries in the United States each year and ultrasound, which provides information on both the condition of the fetus and the mother, is being used in 40 percent of the pregnancies. Ten to 30 percent of them might not be indicated, he added.

According to the Times article, Nichols said, "We are aware a lot of these are done by people who are told by their neighbors, 'You ought to get a picture of your baby'." He explained the ultrasound pictures then are used to make curious additions to baby albums, although many of them serve no medical purpose.

The Blues president said the program, part of what the group calls its medical necessity guidelines, has the support of the American College of Obstetricians and Gynecologists, the American College of Radiology, the American College of Physicians, the American Academy of Pediatrics, the American College of Nuclear Physicians, the Society of Nuclear Medicine, the American Academy of Neurology and the American Association of Neurological Surgeons.

Both Tresnowski and Dr. Gerald Dodd, chairman of the board of chancellors of the College of Radiology, said the guidelines will not affect routine screening available in some Blues policies, such as mammograms received routinely by many women after the age of 40 to detect breast cancer early.

Here are some of the guidelines in the new policy, as summarized by Tresnowski:

Breast cancer—Neither thermography nor diaphanography is recommended. X-ray mammography might be needed when a breast mass or malignancy is suspected. Ultrasound might be needed when mammography findings are inconclusive.

CAT scans — A scan using computerized axial tomography, an advanced X-ray technique — should not be used to evaluate minor headaches. Radionuclide imaging is "rarely necessary for accurate diagnosis" and its use will require special written justification, he said.

In 1983, American industrial processes created 80 billion pounds of toxic wastes — 350 pounds per person — with 50,000 existing toxic waste dumps in the 50 states.

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Cutting out one egg a day can lower cholesterol levels dramatically and reduce heart disease and hardening of the arteries, according to a study by Dr. Frank M. Sacks of Brigham and Women's Hospital, Boston.

Trauma Medicine: 'Golden Hour' of Life Saving

(Editor's Note: The following article is excerpted from a lengthier story written by Terry Petersen and first published in the Bear Paw Sentinel, a weekly newspaper in Havre. As described by Drew Dawson, chief of the emergency medical services bureau in the Montana Department of Health and Environmental Sciences, "It's one of the best jobs of coverage of the subject I've seen.")

There is a statewide program in Montana designed to train rural and urban doctors in trauma medicine.

Coupling the skills and expertise of physicians, nurses and emergency medical technicians, the course presents lectures, patients and reports in an organized scenario depicting a traumatic injury and demanding immediate response by the medical team.

The course is the answer of many sponsoring groups across the state to a need for added skills in treating trauma and increasing the chances for survival from debilitating injury or death.

With the Advanced Life Trauma Support (ATLS) course, a doctor can react with the speed and skill of the "big city" emergency room doctor.

According to Dr. Stuart Reynolds, a general surgeon in Havre and co-director of the ATLS course, the program presents a framework from which rural and urban physicians can operate in dealing with trauma.

Dr. Reynolds and Dr. Charles Rinker, a Bozeman general surgeon, share the responsibility for the direction and management of the ATLS course.

Integrating the efforts of the state department's EMS bureau, the Montana Committee on Trauma, and Montana State University, the course pulls together the public, private and volunteer sectors in the state to train medical personnel and assure quality trauma care.

The ATLS course is an adaptation by the American College of Surgeons of a Nebraska program and Drs. Reynolds and Rinker serve on the Montana Committee on Trauma for the College of Surgeons as chairman and vice chairman, respectively. The pair also is national affiliate faculty for the College of Surgeons and the only ATLS course directors in Montana.

In discussing the need for the course in the state, Dr. Rinker points to trauma as a leading cause of death in the nation, surpassed only by cancer and heart disease.

The first hour following a trauma can, according to Dr. Rinker, make the difference between life, death or an overwhelming disability. "Significant intervention at this 'golden hour' is the focus of our course."

For a typical weekend course, 16 physician-students gather in Bozeman to be challenged, trained and tested in trauma medicine. Six physician instructors, with six nurses and emergency medical technicians, put together and execute a two-day course packed morning to night with case studies, lectures and patient stations where trauma is reenacted and physician-students learn to meet the medical needs which arise immediately following an injury.

Role-playing situations are performed by participating EMTs, registered nurses and MSU medical students.

Hollywood actually had a role in the initiation of the patient scenes for the first ATLS course in Montana.

Contracted by the state's EMS bureau, Peter Deyell, a makeup artist from Hollywood, came to Montana and trained the EMS staff in the techniques and materials used by professionals when they reenact crash scenes for film with stunt men.

Kenneth Threet, himself an EMT with the state bureau, is considered the state's makeup artist supreme. Building on Deyell's base, Threet has adapted new and different methods to increase the "real look" and has succeeded in producing actor-patients who would send any hospital emergency room into high gear.

One of the patient stations set up for the doctor-students depicts a severely burned man brought into a small-town hospital emergency room. Threet's finished product is a masterpiece — every detail of the injury depicted and the visual impact overwhelming.

For Dr. Charles Johnson, a Butte surgeon and a course instructor, "It is the best continuing education course I've taken since my surgical residency."

Dr. Irene Dorr, emergency room physician from St. Vincent Hospital

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HEALTH EVENTS CALENDAR

(Please submit all items for inclusion in this calendar at least two months in advance of scheduled date for event, if possible.)

Date	Event	Location	Sponsors
July			
8	Horse-A-Thon for Huff 'n Puff	Butte	Charlie O'Leary
9-10	Vehicular Extrication Training	Havre	DHES, Dept. of Justice
12	Public Hearing, Standards for Licensing Chemical Dependency Treatment Centers	Helena	DHES
13	Public Hearing, Lab fees adjustment	Helena	DHES
22-28	Camp Diamont for young diabetics	Hyalite Lake, Bozeman	ADA-Montana
August			
5-10	Camp Huff 'n Puff, 1st week	near Helena	ALA of MT
6-7	Vehicular Extrication Training	Billings	DHES, Dept. of Justice
8-10	3rd Rocky Mtn. conference on High Blood Pressure control	Billings	HHS, DHES
9-10	Vehicular Extrication Training	Butte	DHES, Dept. of Justice
12-13	Vehicular Extrication Training	Missoula	DHES, Dept. of Justice
12-17	Camp Huff 'n Puff, 2nd week	near Helena	ALA of MT
15-16	Vehicular Extrication Training	Great Falls	DHES, Dept. of Justice
19-20	Vehicular Extrication Training	Glasgow	DHES, Dept. of Justice
22-23	Vehicular Extrication Training	Lewistown	DHES, Dept. of Justice
October			
11-12	Conference on Developmental Disabilities	Great Falls	SRS

Trauma Medicine: 'Golden Hour' of Life Saving

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in Billings and also a course instructor, believes the strength of the course is its practicality. "This course is taught by practicing physicians to practicing physicians and you go home from the ATLS course and practice what you've learned."

As a regional trauma center, St. Vincent's emergency room sees many transfer cases from around the state. According to Dr. Dorr, since the advent of the course in Montana in 1980, trauma care has increased considerably.

"More patients are arriving in Billings in better shape and with greater chances for good recovery because of this statewide effort in trauma medicine training."

For Dr. Reynolds, the fact the instructors are Montana practicing physicians adds to the credibility, usefulness and applicability of the course. "We have put together a teaching staff which does a fantastic job and is respected by the student-doctors."

Dr. George Takach, chief emergency room physician at St. James Hospital in Butte and another instructor, says he would recommend the ATLS course to any doctor who sees trauma, but especially to those who see little trauma. "Many physicians do not see enough trauma in their hometowns to stay as sharp as this course keeps them."

And, yet another instructor, Dr. William McGregor, a Great Falls surgeon, says, "The course teaches the nuts and bolts of trauma medicine. It's practical, interesting and helpful in assessing and managing trauma, showing the physician what to do and what not to do." Dr. McGregor participates in the treatment of burn victims before they are transferred to a regional burn center.

"ATLS is the most comprehensive educational offering in the state," according to Ann Wells, nurse coordinator for the program. It's her job to be certain everything happens — people in place, equipment on time and stage props in order before the medical scenarios begin.

In addition to the physicians' course, the sponsoring organizations put together an MD/RN ATLS course which trains physician-nurse teams from small towns and rural areas in trauma medicine.

For EMS bureau chief Dawson, courses such as ATLS bring the state that much closer to comprehensive, contemporary medical care. "It's an excellent program providing training of rural doctors in trauma and improving the medical doctor's awareness of emergency medical services which exist in the state.

"When the doctors work side-by-side with EMTs they begin to understand the importance of the EMT role in medicine."

Dawson asserts there isn't a medical group in the state with better training and experience in the immobilization and transportation of patients than the EMTs. "Doctors leave this course with respect for the EMTs' expertise and are supportive of EMT programs in their local communities."

The EMS bureau is charged with development and maintenance of emergency medical systems throughout the state. Realizing rural areas are all too often short on people and experience in treatment of trauma, Dawson and his staff promoted funds, people and equipment to start Montana's ATLS program.

The "product" speaks for the program:

Dr. David Brook, Missoula emergency room physician — "For anyone who doesn't deal with trauma regularly, it's excellent. I deal with trauma daily and it was an excellent review for me. Many times transfer patients from rural areas don't have all these things done for them in treatment of their trauma, and if doctors in the field had this course things would improve considerably."

Dr. Ted Scofield, Rocky Boy Medical Center internist — "I'm amazed the course came so late in my training. It should be a requirement for any physician working in an emergency room in rural areas and should be a part of the certification process."

Dr. Tom Suleiman, Surrey, BC — "It is an extremely creative, positive educational experience. I particularly appreciated exposure to the extreme trauma cases."

Dr. Barbara Lloyd, Northport, NY, surgical resident — "It's frightening to walk in cold to an acute trauma because it is complex and demands immediate action. The ATLS course seems a must for rural areas."

Jim Jensen, Miles City emergency medical technician and member of the ATLS staff — "The course is a vital link between the EMT and physician. It gives the EMT an excellent opportunity to work with physicians at another level so both can appreciate the other's contributions and point of view."

Natural Foods Better, Cheaper Than Convenience, in Long Run

Andrea L. Pagenkopf, food and nutrition specialist with the Cooperative Extension Service at Montana State University has issued some warnings about dried convenience foods through the Montana Nutrition Council newsletter.

Pagenkopf explains that while most of the foods are fairly nutritious they might be lacking in elements, or certain ingredients not found in the natural foods they imitate. Consumers should be aware that they are not necessarily adequate substitutes.

These products include several main dish, beverage and dessert offerings, as well as dietary supplements. Most of them are composed mostly of soybeans or their derivatives, and are advertised as healthful because they are low in fat, protein and sodium, and free of cholesterol and preservatives. The advertising indicates protein from soybeans is superior to that from animals, which is untrue.

Imitation milks are made from whey, and while highly nutritious, they contain half the protein and less calcium than found in skim milk with the same calorie level. Most Americans already consume too little calcium.

Some of the supplements contain herbs and other ingredients of questionable worth and safety. These include licorice root, which increases blood pressure; vitamins A and D in amounts exceeding the recommended amounts (possibly toxic); and a 'human growth hormone' combination of three amino acids which evidence has shown to be of doubtful benefit and questionable safety when ingested by humans.

Consumers should remember that such convenience products are also more expensive than their natural counterparts, in most cases. They may offer certain advantages, as when backpacking or traveling by camper, but in the long run, natural is not only better, but cheaper.

According to Equifax Services, a company which monitors health care costs, 93 percent of hospital bills are inaccurate and 85 percent of those errors are in the hospitals' favor. Two-thirds of the errors are in pharmacy and laboratory charges and only 3 percent in board and room.

HEALTHLINE Advice - Learn Before You Burn!

(Editor's Note: The following article was recommended to us by Robert Moon, who heads the health education program in the Montana Department of Health and Environmental Sciences. The story appeared in "HEALTHLINE," a monthly publication of the Robert A. McNeil Foundation for Health Education, under the byline of Jonathan Angel.)

Ah, for a tan, that warm, healthful-seeming glow, sign of success, leisure, and attractiveness to the opposite sex!

Although we've already heard a few things about the possible health dangers, most light-skinned Americans are spending the summer either acquiring tans or wishing they could.

Time was that people — women especially — took every precaution to avoid the sun, wearing hats and using parasols. That's when work was predominantly agricultural and outdoors, and it was only the obviously wealthy who could afford to remain light-skinned (and indoors).

But, when work moved indoors, then a brown skin became the opposite, a sign of money and leisure!

In the 1920s, the famous French designer Coco Chanel did much to popularize tan skin.

In the 50s, the bikini began to be popular. As swimwear covered less and less, the desire for brown skin increased.

Unfortunately, suntanning is not good for you. Although sunlight looks nice and feels friendly to the skin, it has a sinister component — invisible ultraviolet (UV) radiation.

UV light can kill or cripple skin cells; it might cause mutations or interfere with the metabolism of other cells; it can injure blood vessels near the skin's surface (increased circulation of blood to these wounded cells is responsible for the red color of sunburn).

Toxic debris from dead cells can enter the bloodstream and cause the characteristic fever of sun poisoning.

Chronic exposure to the sun causes hardening and thickening of the skin in those who tan easily, blotching and freckling in those who don't.

The sun's rays will leave the skin rough, leathery, dry and wrinkled — in a word, aged.

And, this damage is irreversible!

More seriously, two of the three types of skin cancer — basal-cell and squamous-cell carcinomas — have been conclusively linked to UV radiation, and the third — melanoma — might be linked to it as well.

One study shows 2½ times as much non-melanonic skin cancer in the sunny Dallas area as in the Minneapolis-St. Paul region.

UV light is insidious because it cannot be seen nor felt. It can reach you when you're not in direct sunlight or even hot, penetrating light cloud cover and bouncing off sand. As much as 50 percent of the sun's UV light can reach you even through water.

Obviously, the more intense the sunlight, the stronger the UV radiation. That's why the noonday sun is so dangerous.

Ironically, the tan we prize so highly is nothing more than the body's attempt to protect itself against the UV light.

The UV rays stimulate special cells in the lower layers of the skin to produce melanin, a brown pigment. Other cells start dividing, creating new skin as part of the body's attempt to repair itself. As they push their way to the upper layers of skin, these new cells pick up the melanin, which will help to scatter future UV rays.

Normally, new skin cells take three or four weeks to reach the surface, where they later die and are shed unnoticed. The body's response to excessive sunlight shortens this process to four or five days.

A person trying to rush a tan will burn and then peel. Nothing can make you

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— INDICATORS —

(Items in this column are gleaned from a variety of sources, and are merely "Indicators" of recent medical research direction and results. Treasure State Health assumes no responsibility for the scientific accuracy, beyond giving the source of the report.)

Herpes Treatment — Acyclovir, a drug already on the market as a prescription ointment to speed healing of genital herpes outbreaks, has been found to be effective in capsule form to prevent or slow down recurring eruptions of this disease. The drug does not cure the disease, but patients who have been given acyclovir capsules two to five times daily over a period of several months have shown the capsules eliminate or greatly reduce the number of new flareups of the infectious rash.

Meningitis Vaccine — A long-term followup of 50,000 children who were given a vaccine, which prevents infection with hemophilus influenzae type b, indicates the vaccine should be added to the list of routine childhood shots. The study, directed by Dr. Heikki Peltola of the National Public Health Institute in Helsinki, concludes the vaccine could eliminate 60 percent of the serious disease resulting from hemophilus infections, including childhood meningitis, epiglottitis, arthritis and pneumonia. The vaccine is not effective in children under 18 months of age, however.

Caffeine Helps Asthma — A study conducted at the University of Manitoba, and published in the New England Journal of Medicine, says the caffeine in two cups of strong coffee can serve as an effective substitute for a common prescription drug in relieving asthma attacks in young patients. Theophylline, a prescription medicine routinely taken by people suffering from chronic asthma, is chemically similar to caffeine. In the study, 13 patients took caffeine and 10 received theophylline. Both treatments effectively relieved their asthma.

Test for Chlamydia — A simple half-hour test can accurately diagnose chlamydia, a common form of venereal disease that is a leading cause of infertility in women, according to test results of a study directed by Dr. Milton R. Tam of Genetic Systems. Dr. Tam reports the test, on 926 people, accurately showed the infection about 95 percent of the time. Chlamydia frequently produces no symptoms, and can be effectively treated with tetracycline.

NMRs Approved — The U.S. Food and Drug Administration has approved the marketing of nuclear magnetic resonance imaging devices by two manufacturers. The large, donut-shaped scanners can show detailed cross sections of the body's interior without X-rays or other ionizing radiation. Physicians have reported NMR useage as valuable in helping diagnose multiple sclerosis, locating brain and lung tumors, and measuring the buildup of fatty deposits in blood vessels. Other possible benefits might include determining damage to the heart muscle after a heart attack, diagnosing lumps of the breast, and kidney and liver disease.

Sodium Content — Manufacturers who list calories and other information on processed food labels, or who wish to market their products as "low" or "reduced" sodium, or as "unsalted," must list the milligrams of sodiums on their labels starting in July, 1985, according to the FDA.

HEALTHLINE Advice–Learn Before You Burn!

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tan faster than your genes permit, and how dark your tan ultimately gets is linked genetically to how actively your body produces melanin. Those with fair skin produce much less than those with darker skin, who can tan more quickly and with less trouble.

Frequent, carefully metered doses of sunlight can help you get a tan, but tanning is more than just a matter of technique.

After reading all of this, if you still want a tan, there are no products you can buy that actually can stimulate tanning, although some dye the skin a yellowish-orange.

However, you can buy lotions to protect your skin from UV light, allowing you to stay out in the sun longer. "Suntan lotion," in other words, is more properly called "sunscreen lotion."

Prior to the 1940s, lotions were little more than scented grease (such as cocoa butter).

During World War II, the sun's rays became a recognized health hazard, and a type of petroleum jelly, called "red-vet-pet," was used. This was so unappealing to use that PABA (para-aminobenzoic acid) gained popularity. It was one of the first modern sunscreen chemicals, although it rarely is used today because it washes off in water and tends to stain clothes.

Today's sunscreens use a variety of chemicals and all have been evaluated by the U.S. Food and Drug Administration for safety and efficacy.

They can be chosen on the basis of price, scent and form (lotion, cream, gel, etc.) primarily.

A few claim they will not wash off in water. Consumer Reports magazine branded six sunscreens "clearly superior to the others" because they lived up to this claim. The top four are MMM! What a Tan, Sun Fashicn Tan, Sundown, and Coppertone Shade Plus.

There is one more important way to compare sunscreens. Since the mid-1970s, the FDA has required manufacturers to label their products' effectiveness accurately by using the sun protection factor (SPF). This is a number on each bottle which you multiply by the time you normally can stay in the sun without burning, coming up with a new time. If you normally can stand an hour in the sun without harm, apply a sunscreen with SPF of 2 and you'll be able to stay two hours. Apply a sunscreen with an SPF of 8 (common to all of Consumer Reports' top picks) and you'll be able to stay for eight hours.

The majority of over-the-counter sunscreens range in SPF from 8 to 12.

If you are extremely fair-skinned or have skin problems, your dermatologist might advise you to wear a sunscreen whenever you go outdoors.

If you have an outdoor job, you can buy a high-SPF skin block for quick application to the nose, lips, ears, bald spots or other often exposed small areas. Many of these skin blocks now "disappear into the skin." They are not all the same stuff which make lifeguards' noses turn white!

Mad dogs and Englishmen go out in the noonday sun . . . In Rangoon the heat of noon is just what the natives shun.

— Noel Coward (1932)

Unless you are unusually careful or already dark, it is inevitable that you will get sunburned some day. If this happens, treat it as you would other burns. If it is a first or second degree burn over most of the body, a physician should be consulted.

For most other burns, cool cloths or a cool bath can be soothing. Aspirin can help relieve the pain. Hydrocortisone ointments (now available without prescription) and cold cream, Noxema, or Nivea also can help soothe the skin. Products such as Solarcaine and Bactine have special anesthetics, although they are known to irritate some skins.

If the burn is bad enough to cause peeling, you'll itch and scratch. A small amount of scratching can, together with the friction of clothes, probably help the body to shed dead skin and renew itself, but don't let your skin become inflamed or abraded.

If you're burned, you're in an ideal position to ponder the health hazards of UV radiation, and you'll approach the sun a lot more wisely next time!

* * * * *

The FDA has issued the following descriptions of SPF values for sunscreen products:

- SPF 2 to 4 — Minimal protection from sunburning; permits suntanning; recommended for people who rarely burn and tan easily and deeply.
- SPF 4 to 6 — Moderate protection from sunburning; permits some suntanning; recommended for people who tan well with minimal burn.
- SPF 6 to 8 — Extra protection from sunburning; permits limited suntanning; recommended for people who burn moderately and tan gradually.
- SPF 8 to 15 — Maximal protection from sunburning; permits little or no suntanning; recommended for people who always burn easily and tan minimally.
- SPF 15 or more — Ultra protection from sunburn; offers most protection; permits no suntanning; recommended for people who burn easily and never tan.

Ibuprofen is the first over-the-counter pain reliever approved by the U.S. Food and Drug Administration in 29 years and will be marketed under the brand names Advil and Nuprin.

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Health care costs in Montana rank 10 to 25 percent above the national average.

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The federal government spent $56.8 billion in 1983 on Medicare, the health insurance program for 26.5 million elderly and 3 million disabled Americans.

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Medicaid, a federal-state program, provides health care for 22 million poor people. Payments in 1983 totaled $35.3 billion, of which the federal share was $19 billion.

Shodair Staff Stars

Staff members from Helena's Shodair Children's Hospital played key roles at the 17th annual March of Dimes national foundation conference in mid-June in Denver.

Dr. John Opitz, chairman of Shodair's department of medical genetics, presided and spoke at one session of the four-day conference on birth defects; Dr. James Reynolds, associate chairman of that department spoke on a newly discovered malformation/mental retardation syndrome; and, research on a rare chromosome-deletion syndrome has been submitted for publication to the association by Dr. Art Daniel, director of Shodair's cytogenetics laboratory; Joan Westphal, genetic counselor and clinical coordinator; and Dr. Jeffrey Hunt, Great Falls pediatrician.

HMO Growth Probably Will Cut Hospital Use

(Continued from Page 1)

patients served cannot explain the HMO cost advantage.

The experiments randomly assigned 1,149 people to the Group Health Cooperative of Puget Sound in Seattle. Meanwhile, 431 others were given free care from any fee-for-service physicians they wanted to see.

The HMO patients were found 40 percent less probable to be admitted to a hospital than were those who got free care from doctors in private practice. And, the average annual cost of their care was 28 percent lower.

"One might expect considerably less hospitalization as the HMO market share grows, because the national hospitalization rate is not far from the free-plan value," the researchers concluded.

Meanwhile, another Associated Press story from Washington, DC, says that with the government's encouragement, Medicare patients can save cash or obtain extra services—such as eyeglasses, prescription drugs, dental care — by switching to the private, prepaid health-care programs this fall.

The key to the benefits of joining an HMO is whether that medical care fits an elderly person's lifestyle and health needs. Those in poor health who don't travel a lot would benefit the most.

Peggy Pond of Group Health Association of America says a person who spends 6 months in New York and 6 months in Florida every year would not be a good HMO candidate, unless the health plan was part of a national chain with easily accessible branches in both states.

Also, HMOs might be advantageous only to those who live nearby. Pond said Medicare patients might not be ambulatory, and "it would not be a particular savings to them if they were in the next town."

The AP story notes the option of joining an HMO while receiving Medicare benefits isn't new — the U.S. Congress approved the idea in 1982 — but what is new are the government incentives for the elderly to participate.

With Medicare costs soaring to a projected $76 billion next year, the government is eager to take advantage of the HMO reputation for providing high quality care for less money.

Also, there is access to more preventive care without extra cost, and avoiding the difficulty of finding doctors who will accept Medicare rates as full payment.

The government is offering favorable rates as an inducement for HMOs and variations of prepaid health plans to seek out and sign up some of Medicare's 30 million beneficiaries.

The U.S. Department of Health and Human Services expects up to 600,000 Medicare patients to make the switch in the next few years.

The government estimates Medicare beneficiaries would pay a flat monthly premium of $20 to $50, depending on the projected use of medical services by all Medicare patients enrolled in a particular HMO. The premium is paid regardless of how well or how sick the beneficiary is in the subsequent year.

"It's something that should be considered. It has the potential for a lot of benefits," according to Bernard Truffer, of the department's Health Care Financing Administration, which runs Medicare.

Truffer did say an elderly person in extremely good health might pay more to participate in an HMO than he would if he saw a doctor as needed. Another consideration, he said, is that in switching to an HMO, the patient probably loses his family physician.

"You have to receive services from the HMO," Truffer explained. "If a patient insists on seeing a physician not affiliated with the HMO we are no longer going to pay for him to see that doctor."

Government regulations intended to encourage Medicare patients' enrollment in HMOs were outlined in May and are expected to become final in September or October.

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